

*Sent 3/1*

6. (Thrice amended) A truncated *Bacillus* pullulanase comprising a deletion of about 100 amino acids from the amino terminus of a pullulanase obtainable from *Bacillus deramificans*, wherein said truncated pullulanase is capable of catalyzing the hydrolysis of an alpha-1, 6-glucosidic bond.

*E1*

7. (Thrice amended) A truncated *Bacillus* pullulanase comprising a deletion of about 200 amino acids from the amino terminus of a pullulanase obtainable from *Bacillus deramificans*, wherein said truncated pullulanase is capable of catalyzing the hydrolysis of an alpha-1,6-glucosidic bond.

*E1 cont*

8. (Thrice amended) A truncated *Bacillus* pullulanase comprising a deletion of about 300 amino acids from the amino terminus of a pullulanase obtainable from *Bacillus deramificans*, wherein said truncated pullulanase is capable of catalyzing the hydrolysis of an alpha-1,6-glucosidic bond.

*E2*

12. (Thrice amended) A modified *Bacillus* pullulanase which is capable of hydrolysis of an alpha-1,6-glucosidic bond, wherein the modification is an addition of at least one amino acid to the amino terminus of a mature pullulanase amino acid sequence obtainable from a *Bacillus deramificans*, wherein the additional amino acid at the amino terminus is an alanine.

*E3*

14. (Twice Amended) A truncated *Bacillus* pullulanase produced by a method comprising the steps of

a) obtaining a recombinant host cell comprising nucleic acid encoding a mature pullulanase said nucleic acid having at least 70% identity to the polynucleotide sequence as shown in SEQ ID NO:1,

b) culturing said host cell under conditions suitable for the production of a truncated pullulanase, and

c) recovering the truncated pullulanase wherein the truncated *Bacillus* pullulanase comprises a deletion of about 100 amino acids from the amino terminus of a *Bacillus deramificans* pullulanase and said truncated pullulanase is capable of catalyzing the hydrolysis of an alpha-1,6-glucosidic bond.

*E4*

27. (Twice amended) An enzymatic composition comprising a truncated *Bacillus deramificans* pullulanase wherein said truncated pullulanase is selected from the group of pullulanases consisting of

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- Cont*
- a) a deletion of up to about 100 amino acids from the amino terminus of a *Bacillus deramificans* pullulanase,
- b) a deletion of up to about 200 amino acids from the amino terminus of a *Bacillus deramificans* pullulanase, and
- c) a deletion of up to about 300 amino acids from the amino terminus of a *Bacillus deramificans* pullulanase, wherein said truncated pullulanase is capable of catalyzing the hydrolysis of an alpha-1,6-glucosidic bond.

Please add the following new claims.

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52. The truncated *Bacillus* pullulanase of claim 6, wherein said deletion is from a pullulanase having the sequence shown in SEQ ID NO: 2.

53. The truncated *Bacillus* pullulanase of claim 7, wherein said deletion is from a pullulanase having the sequence shown in SEQ ID NO: 2.

54. The truncated *Bacillus* pullulanase of claim 8, wherein said deletion is from a pullulanase having the sequence shown in SEQ ID NO: 2.

*E 5*

55. The enzymatic composition of claim 27 wherein the deletion is obtained from a pullulanase having the amino acid sequence shown in SEQ ID NO: 2.

56. The truncated *Bacillus* produced according to the method of claim 14, wherein the nucleic acid sequence encoding the mature pullulanase is SEQ ID NO: 1.

57. The truncated *Bacillus* produced according to the method of claim 14, wherein the mature pullulanase has the sequence shown in SEQ ID NO: 2.